

# ***Headquarters U.S. Air Force***

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## **Reduction In Total Ownership Cost (RTOC) Program**



**SAF/AQXA  
April 28, 2004**

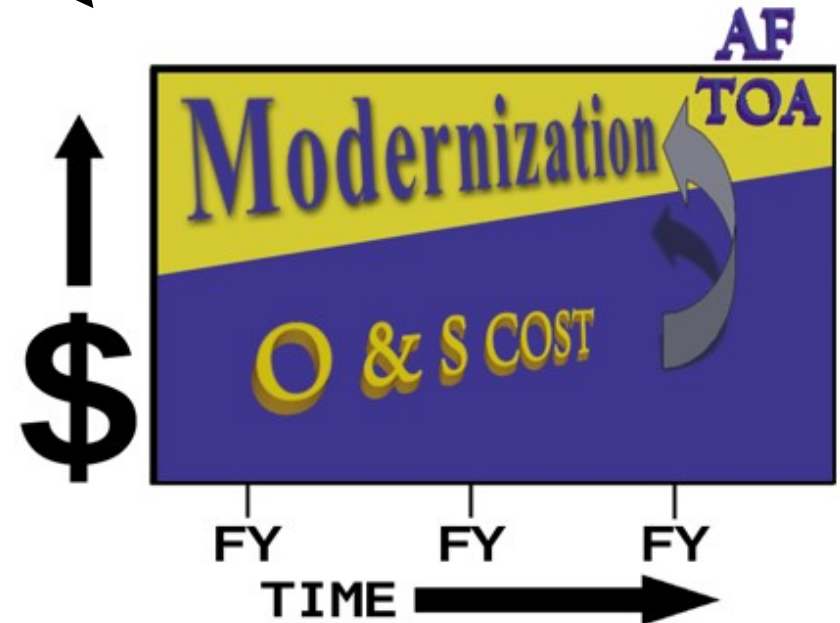
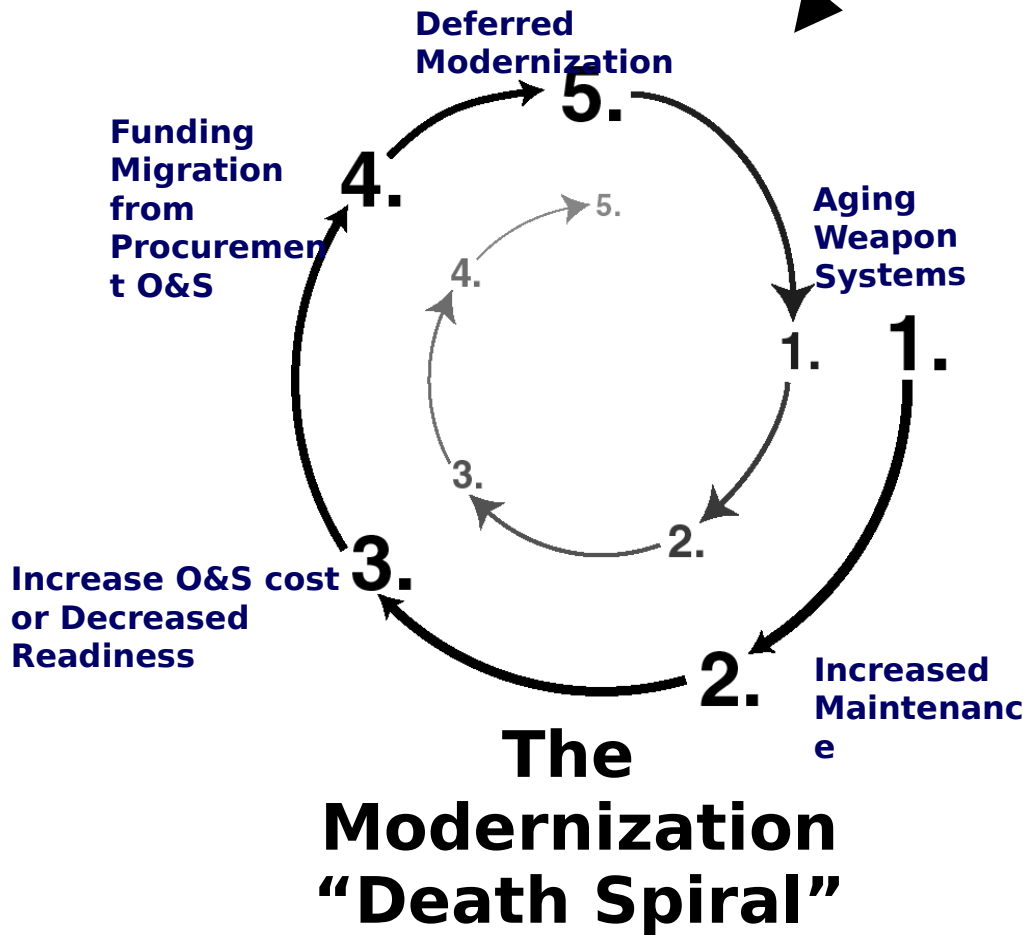
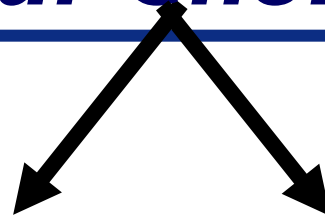
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# Why RTOC ? Our Choices



**Save/Invest to  
Modernize**



# ***RTOC Program Origins***

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- **12-Star letter: ACC/CC, AMC/CC, AFMC/CC (Sep 98)**
  - **Growing O&S costs are a “threat” to future modernization and readiness**
    - **Lead commands must lead and invest to reduce costs**
    - **Quid pro quo -- keep portion of savings in command**
- **CORONA interest/actions - jumpstart pilots**
  - **Establish a process to track cost reduction initiatives**
  - **Develop policy directive to institutionalize RTOC**
- **Defense Systems Affordability Council program initiation - create 30 Pilots Programs ....10 for each service with a 20% stretch goal to reduce O&S costs from a 1998 O&S baseline**

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# ***OSD RTOC Vision***

- **Through RTOC Principles,**
  - **All defense systems will perform with increasing readiness and capability**
  - **Avoid increased operation and support costs**
  - **Improve logistics footprint**
    - **Institutionalize the continuous implementation of innovative process and hardware improvements**

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# ***RTOC -Work In Process***

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- **Transforming our acquisition processes**
  - **Capability focus**
  
- **RTOC concept - work In progress**
  - **Air Force Pilot Programs making progress**
  - **PBD 721 funding - excellent proof of concept**
    - **Total PBD investment - \$37.5 million since FY99**
    - **Produces \$266.2 million in material savings/cost avoidance over 20 year life-cycle**
      - **Excludes fuel and personnel**

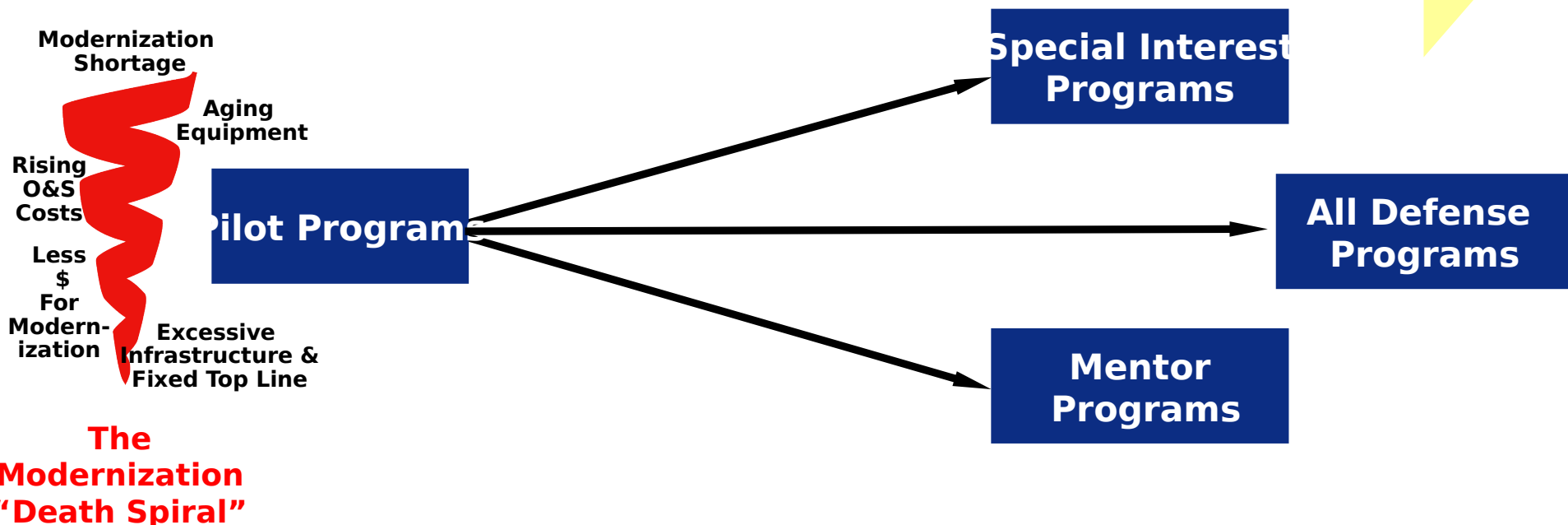
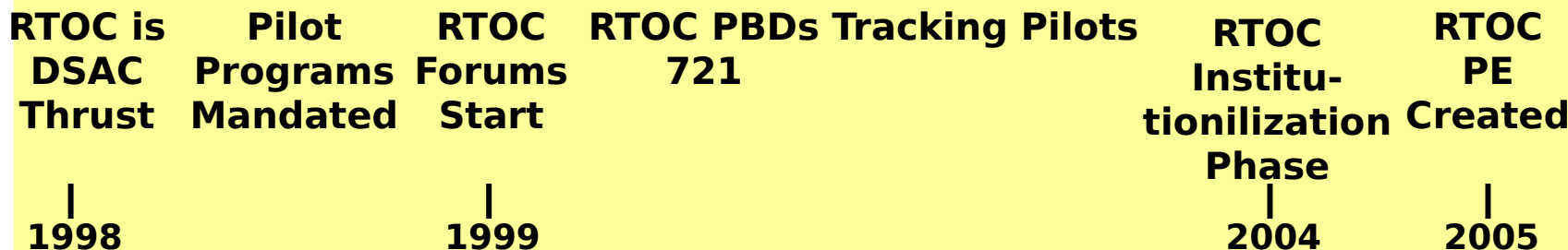
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# RTOC Evolution



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# OSD RTOC Funding

- In the past, RTOC funding based on OSD Program Budget Decisions (PBDs)

- FY01 - AF receives \$11.6M RTOC funding from OSD

- FY02 - RTOC PBD cycle canceled by OSD

- FY03 - AF receives \$24.9M

- FY04 - AF receives \$0.9M

- Dec 03 PBD 707 established an OSD PE thru  
(FYDP) FY 05 FY 06 FY 07 FY 08 FY 09

Service-Wide \$27,400 \$25,200 \$25,200 \$25,200 \$25,200

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# ***Recent OSD RTOC Guidance***

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- **Mr. Wynne's memorandum of 16 Dec 03:**
  - **RTOC goal**
    - **Maximize cost avoidance on total defense systems' FY 2010 O&S costs by offsetting 30 percent of the inflation predicted from an FY 2004 baseline**
  - **Special interest programs (Global Hawk and B-1/B-2 propulsion programs)**





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# ***Leadership Roles***

## **RTOC Requires a “Sustained” Cultural Change**

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**DoD and AF leadership must constantly commit to the importance of and need for reducing ownership costs**

- **Motivate - by funding initiatives**
- **Commit - to most of the savings remaining with the MAJCOM**
- **Produce and promote successes - through consistent support and repeated advertisement**
- **Don't just “Try” -- Do It!**

**Change is Essential to Improvement**

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# ***Future Project Selection***

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- **Standardize information submitted**
- **OSD panel to weigh**
  - **Value to warfighter**
  - **Readiness improvement**
  - **Risk**
  - **ROI**
- **Decisions made by October 1 of each year**

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# ***Guidelines***

- **Project guidelines:**
  - **Less than 3 Years of funding**
  - **No more than \$3M funding in any year**
  - **No more than \$5M total funding for a project**

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# ***Ingredients for Success***

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- **Ideas**
  - **Repairs**
  - **Processes**
  - **Anything else that saves money**
- **Details**
  - **Description, funding requirement**
  - **Engines/NSNs affected**
  - **Old/new process data**
  - **Track actual savings**

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# OSD RTOC Template

<b><i>R-TOC Investment Template</i></b>							
<b>Investment Requested</b>							
<b>(Enter Millions of Then Year Dollars)</b>							
Enter Project name	FY05	FY06	FY07	FY08	FY09	FY10	
Advanced War Machine	0.100	0.050					
<b>Total Investment (TY\$M)</b>							
<b>0.150</b>							
<b>10-Year Discount Factor for Then Year (Nominal) Dollars</b>							
<b>4.2%</b>							
Discount Factors	1.000	0.960	0.921	0.884	0.848	0.814	
Present Value(s) of Investment(s)							
	0.100	0.048	0.000	0.000	0.000	0.000	
<b>Total Discounted Investment</b>							
<b>0.148</b>							
<b>Savings/Cost Avoidance</b>							
<b>(Enter Millions of FY05 Constant Dollars)</b>							
Project name	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Advanced War Machine		0.030	0.090	0.090	0.090	0.090	0.090
<b>Total Savings/Cost Avoidance (CY\$M)</b>							
<b>2.19</b>							
<b>10-Year Discount Factor for Constant (Real) Dollars</b>							
<b>2.5%</b>							
Discount Factors	1.000	0.976	0.952	0.929	0.906	0.884	0.862
Present Values of Savings/Cost Avoidances							
	0.000	0.029	0.086	0.084	0.082	0.080	0.078
<b>Total FYDP Discounted Savings/Cost Avoidance</b>							
<b>0.360</b>							
<b>Total Life Cycle Discounted Savings/Cost Avoidance</b>							
<b>1.600</b>							
<b>ROI (FYDP)</b>							
<b>2.43</b>							
<b>ROI (LCC)</b>							
<b>10.81</b>							



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# ***RTOC Projects Evaluation Summary***

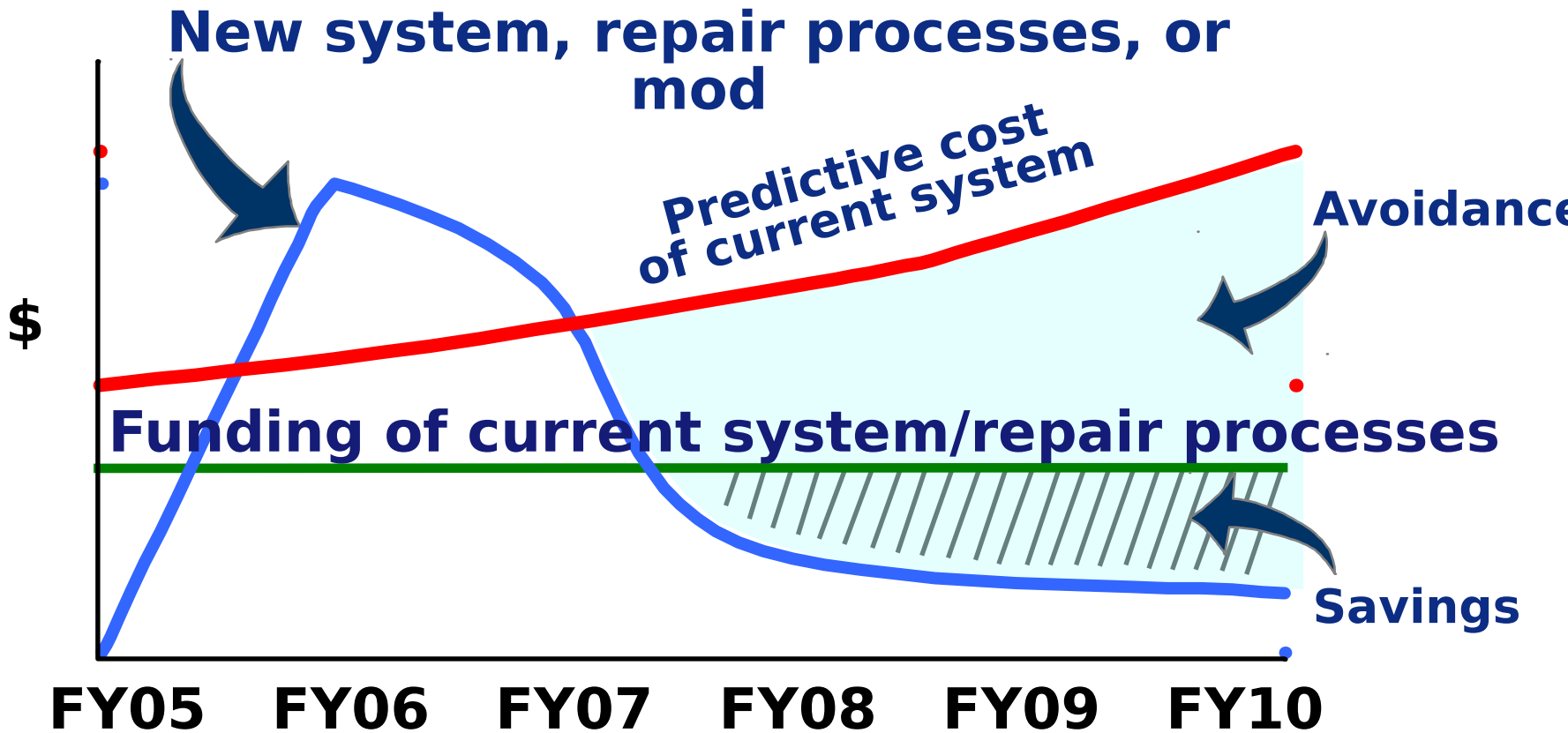
<b>EVALUATION SUBJ ECT AREAS</b>	<b>SCORING WEIGHTS</b>		
	HIGH RATING	MEDIUM RATING	LOW RATING
<b>OBJ ECTIVE:</b>			
ROI (FYDP)	10 (Greater than 10:1)	5 (Between 10:1 & 5:1)	3 (Less than 5:1)
ROI (LCC)	10 (Greater than 10:1)	5 (Between 10:1 & 5:1)	3 (Less than 5:1)
Service Ranking	10 (In top third of ranking)	5 (In middle third of ranking)	1 (In bottom third of ranking)
Crossover Year (year when return is greater than investment)	5 (Less than 3 years)	3 (3 years)	1 (More than 3 years)
Payback Year (when total return is greater than total investment)	5 (Less than 4 years)	3 (4 years)	1 (More than 4 years)
<b>SUBJ ECTIVE:</b>			
Operational Readiness	10	5	3
Benefits Credibility	5	3	1
Technology	3	2	1
Schedule	3	2	1
Budget	3	2	1
Management Support	3	2	1

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# Cost Avoidance vs. Cost Savings





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# ***RTOC FY05 & FY06 Project Call, Evaluation and Selection Process***

- **15 Apr - OSD issues call for projects FY05 & FY06**
  - **Congressional interest requires looking at FY06**
  - **OSD (AT&L) trying to grow RTOC like Advanced Concept Technology Demonstration**
- **15 Jun - RTOC initiatives due to SAF/AQX**
- **15 Jul - RTOC initiatives due to OSD**
- **7 Aug - OSD evaluation team provides feedback to services**
- **8 Sep - OSD provides rack & stack to services**
- **15 Sep - services provide comments on OSD list**
- **22 Sep - OSD submits “Fund” list to Defense Systems Mgmt for approval**
- **1 Oct - OSD prepares FY05 funding documents (MIPRs)**

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# ***AF RTOC Plan***

- **Institute a method to “Tax” RTOC savings at a rate of 10% starting in FY05**
- **Establish AF “Waterfall” to fund new initiatives**
- **Move “Saved” dollars to PEXXXXXX until new initiatives are approved**



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# ***Proposed RTOC “Transformation” Fund (10% Tax on Savings)***

Initiative X  
Investment  
Savings

**FY04 FY05 FY06 FY07 FY08 FY09**

**\$1.27 \$1.13**

**\$4.77 \$9.30 \$9.31 \$9.40 \$9.25**

Initiative Y  
Investment  
Savings

**\$1.40 \$1.33**

**\$3.16 \$6.54 \$6.77 \$6.99 \$7.22**

**AQX 10% Reinvestment Fund**

**\$0.79 \$1.58 \$1.60 \$1.63 \$1.64**

**Total  
\$7.27M**

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# ***AFTOC - Engine CPFH Tool***

- **Jan 04 - SAF/AQX provided \$50K to add the engine cost break-out in MAJCOM's cost per flying tool**
- **Air Force Cost Analysis Agency and Battelle Memorial Institute are working on this requirement**
- **Anticipated deployment: Oct 2004**



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# ***Summary***

- **The original RTOC Pilot Programs have been successful in reducing O&S costs**
- **Break strong dependence on PBDs**
  - **Establish AF waterfall to fund initiatives that have strong savings stream in the FYDP**
- **Special Interest Programs**